## **Welcome to UITween System**

This system is only used to animate Unity UI elements with the new integrated UI System (4.6 >)

## **A- Editor Setup**

Add the "EasyTween" class to a GameObject in the scene and set a reference to the UI RectTransform Component in the Editor.

The "Animation Parts" class in the editor is responsible for animation propeties such:

- 1- Object State: The initial Object State (UI element)
- 2- Save State: Reset the Object to its initial Object State
- 3- *End State:* What to do with the Object at the end of the animation
- 4- Call Callback: When and which Callback group wil be called
  - a- There are 2 Groups of calls
    - 1- START\_INITIAL / START\_EXIT triggers the callback at the very start of the Entry animation (Callback Object Intro) or Exit animation (Callback Object Exit)
    - 2- END\_OF\_INTRO / END\_OF\_EXIT triggers the callback at the end of the Entry animation (Callback Object Intro) or Exit animation (Callback Object Exit)
  - b- Every Combination is made with this 2 main group of calls
- 5- Callback Object Intro: Object to call at the start or end of the Initial Animation
- 6- Callback Object Exit: Object to call at the start or end of the Exit Animation
- 7- <u>Animation Duration (sec)</u>: How log the animation should be, in seconds.

The Editor Expands the Object class by adding this features:

- 1- Fade In & Out: On Intro An iamtions the objects fades in, and out on Exit
- 2- <u>Position Animations</u>: Set the Start Move, End Move and types of Easing for each iteration from Start- > End & End -> Start
- 3- <u>Rotation Animations</u>: Set the Start Rotation, End Rotation and types of Easing for each iteration from Start- > End & End -> Start
- 4- <u>Scale Animations</u>: Set the Start Scale, End Scale and types of Easing for each iteration from Start- > End & End -> Start

## **B- Dynamic Changes**

You can set the "Animation Parts" class properties dynamically by adding a new Animation Parts class to the EasyTween\_Concrete object Instance.

AnimationParts animationParts = new AnimationParts(

```
AnimationParts.State.CLOSE, // Objetc State

false, // Save State

AnimationParts.EndTweenClose.DEACTIVATE, // End State

AnimationParts.CallbackCall.END_OF_INTRO_ANIM, // CallCallback

new Transform[0], // Intro Callbacks

new Transform[0]); // Exit Callbacks
```

in the EasyTween Concrete Object Class

+ SetAnimationProperties(animationParts: AnimationParts): void

For Position / Rotation / Scale Changes i use the public methodes in the EasyTween\_Concrete Object Class:

- + SetAnimationPosition(StartAnchoredPos: Vector2, EndAnchoredPos: Vector2, EntryTween : AnimationCurve, ExitTween : AnimationCurve): void
- + SetAnimationScale (StartAnchoredScale: Vector3, EndAnchoredScale: Vector3, EntryTween : AnimationCurve, ExitTween : AnimationCurve): void
- + SetAnimationPosition(StartAnchoredEulerAng: Vector3, EndAnchoredEulerAng: Vector3, EntryTween: AnimationCurve, ExitTween: AnimationCurve): void
- + SetFade(): void

## **C- Callbacks**

For using the Callback system just implement the "ICallbackAfterTween" Interface and add the

+ CallBack(): void

methode to your class